

EMDX³ electrical energy meters

└ rail mounting

Technical characteristics

Conform to IEC 61557-12

Active energy accuracy: Class 1 (EN 62053-21)
Class B (EN 50470-1,3) - for MID version

Reactive energy accuracy: Class 2 (EN 62053-23)

Single-phase meters:

Reference voltage U_n : 230 V-240 V
Reference frequency: 50-60 Hz

Cat.Nos 0 046 70, 4 120 68/69

LCD display: 7 digits
Resolution: 0.1 kWh
Maximum indication: 99999.9 kWh

Cat.Nos 4 120 80/81/82/83

LCD graphic display: 9 digits
Resolution: 0.01 kWh
Maximum indication: 999999.99 kWh

Three-phase meters:

Reference voltage U_n : single phase 230 V-240 V
three-phase 230 (400) - 240 (415) V

Reference frequency: 50-60 Hz

Cat.Nos 4 120 40/41/42/43/91/92/93

LCD graphic display: 9 digits
Resolution: 0.01 kWh
Maximum indication: 999999.99 kWh

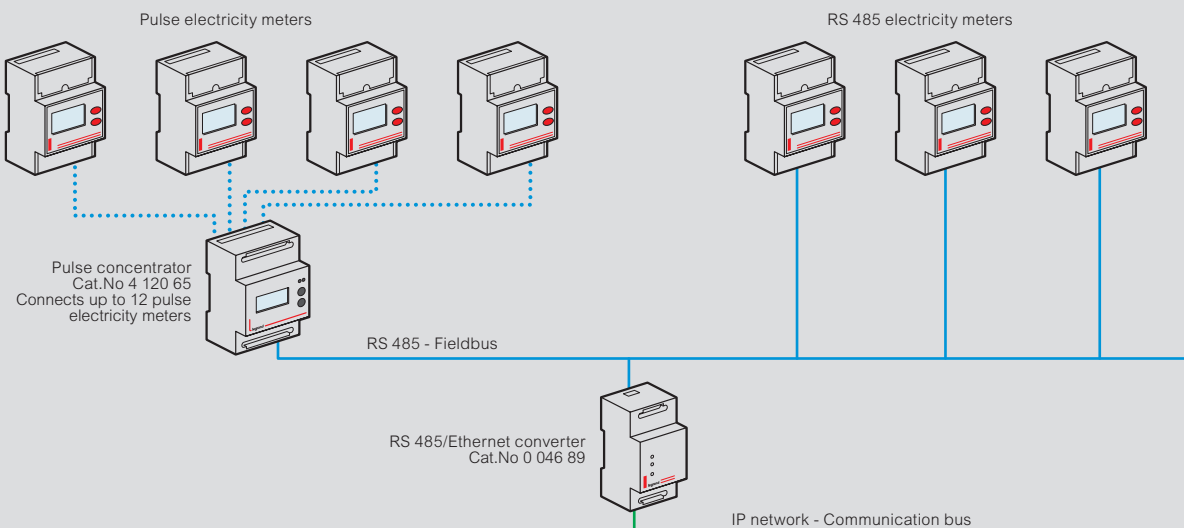
Cat.Nos 4 120 74/75

LCD display: 8 digits
Resolution: 0.01 kWh
Maximum indication: 999999.99 kWh

Cat.Nos		0 046 70	4 120 68	4 120 69	4 120 80	4 120 81	4 120 82	4 120 83	4 120 90	4 120 91	4 120 92	4 120 93	4 120 74	4 120 75	4 120 40	4 120 41	4 120 42	4 120 43			
Type		Single phase								Three-phase											
Connection		Direct connection																Connection via CT			
Number of modules		1	1	1	2	2	2	2	4	4	4	4	6	6	4	4	4	4			
Max. current (A)		32	45	45	63	63	63	63	63	63	63	63	125	125	5 (CT)	5 (CT)	5 (CT)	5 (CT)			
Metering and measurement	Energy	Total active energy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		Total reactive energy		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Partial active energy (reset)				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Partial reactive energy (reset)				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Energy bidirectional measure	Ea + and Ea-by tariff				●	●	●	●	●	●	●	●			●	●	●	●		
		Active power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Power	Reactive power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Apparent power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Average active power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Max. average active power value				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Electrical values	Current		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Voltage		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Frequency		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Power factor		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Dual tariff					●	●	●	●	●	●	●	●	●	●		●	●	●		
	Pulse input					●	○	●	○	●	○	●	○			●	○	●	○		
Connection diagnostic															●	●	●	●			
Time of uses	Total				●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	By tariff				●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Communication	Pulse output	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Modbus RS 485		●		●	●	●	●	●	●	●	●	●	●		●	●	●			
MID certification				●	●	●	●	●	●	●	●	●	●	●		●	●	●			

● Built-in function
○ Dual tariff or pulse input

Interfacing with IP communication network



For direct connection meters, if connected via transformers, the resolution and maximum indication depend on the transformation ratios of these transformers